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Rewarded by Punishment: Reflections on the Disuse of Positive Reinforcement in Schools

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ABSTRACT: Most approaches for dealing with student disruptions involve the use of various forms of punishment such as removals from the classroom, fines, restitutional activities, inschool and out-of-school suspensions, and expulsions. Although some of these approaches may make schools safer by removing the offending students, they have little effect on encouraging students to perform socially appropriate behaviors. There are many reasons why educators find punishment a more acceptable approach for managing students' challenging behaviors than positive reinforcement. This article delineates these reasons and argues for educators to plan the occurrence of positive reinforcement to increase appropriate behaviors rather than running the risk of it haphazardly promoting inappropriate behaviors.

erhaps no other discipline has received as much criticism from various factions of society as has public education. This statement should come as no surprise because public education has always been a convenient political whipping post for some fanatical ideologues to explain a variety of social ills (Reid, 1997). Criticisms often resonate with the public because many of them cannot be disproven. For example, there is no way to refute the contention that "education has failed" because it is inconceivable to experimentally test this belief by forming two groups of children—a treatment group that receives education and a

control group that does not receive education. Sagan (1996) cogently pointed out how assertions that cannot be tested and are immune to disproof are functionally useless regardless of the degree of popular support they may enjoy. Other more specific criticisms of public education such as declining achievement test scores, unresponsive schools, and bloated or top-heavy administrations are outright false (Berliner & Biddle, 1995).

There are, of course, some negative social commentaries on public education that may be justified. For example, funding for public education has been inequitable and the infrastructure of many cities has been crumbling, which fur-

ther detracts from the prospect of sending money to inner-city schools (Kozol, 1991). Another legitimate criticism of public education is that it precipitously adopts policies and procedures that often amount to nothing more than empirically groundless passing fads. The most obvious example was the dissatisfaction with the teaching of mathematics, expressed mostly vocally by university teacher educators, which culminated after the launch of the first Russian Sputnik in 1957. This criticism resulted in the wholesale implementation of (then) "new math" which, predictably, was introduced into the schools without any discernible theory of how change was to be effected nor criteria by which its effects were to be evaluated (Sarason, 1982). A further important criticism central to this article and with wide-reaching educational implications—especially given the inclusion Zeitgeist—is the inadequate way teachers are prepared for managing the increasingly challenging behaviors of students that attend public school. Students' behaviors become challenging when traditional approaches to manage them have failed.

Ironically, behavior management has been consistently mentioned by teachers as an area in which they would like more training (Maag, 1999). This omission is amazing considering that the technology for proactively and positively managing students' behaviors has existed since Skinner's (1953) seminal work in developing, and elucidating upon the use of, principles of operant learning theory. Since that time, positive techniques based on forcement—such as applications of token economies, behavioral contracts, and group-oriented contingencies—have been well developed and empirically validated (Maag & Kotlash, 1994). Novel applications of positive reinforcement include the use of chart moves, lotteries and raffles, 100 square chart, mystery motivators, and the compliance matrix (see Rhode, Jenson, & Reavis, 1995, for a description of these novel techniques based on positive reinforcement).

Positive reinforcement is a universal principle that is in effect regardless of the age, gender, culture, or disability of a child (Wielkiewicz, 1995). Why, then, is it infre-

quently incorporated into college and university teacher training programs? A more perplexing question may be why behavior management techniques based on positive reinforcement are routinely rejected, and even abhorred, by educators and the general public?

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Probably more than any other recent publication, Kohn's book, Punished by Rewards (1993), crystallized the rejection of techniques based on positive reinforcement, and struck a chord that continues to resonate throughout education and society. Although Kohn's arguments have been well received by much of the educational profession, his conclusions ignored significant bodies of literature that provided more support for behavioral procedures than he acknowledged (Cameron & Pierce, 1994). Nevertheless, ideas such as Kohn's have found an apparently wide and receptive audience. Axelrod (1996) believed that techniques based on positive reinforcement lack popular and professional acceptability because they are time-intensive, offer little compensation for educators, contradict popular views of developmental psychology, threaten special interest groups, are socially unacceptable, and demean humans. Ironically, punishment-also a behavioral technique-is widely accepted because it agrees with popular notions about school discipline. Axelrod later suggested more optimistically in the same article that the remedy for the criticisms positive reinforcement has generated is for professionals to continue to work in areas in which they are welcome, to take advantage of opportunities in emerging areas of acceptability, and to employ language and procedures that are more pleasing to practitioners.

Educators do not readily welcome Axelrod's (1996) recommendations even though techniques based on positive reinforcement have had a tremendous impact on managing students' challenging behaviors. Instead, they embrace punishment because it is easy to administer, works for many students without challenging behaviors, and has been part of the Judeo-Christian history that dominates much of our society. Therefore, the purpose of this article is to consider why educators find punishment to be a more acceptable approach for managing students' behaviors than positive reinforcement and to argue that the latter is much more effective than the former.

Three propositions are put forth to support these assumptions. First, positive reinforcement is ignored and misunderstood because of a strong cultural ethos that encourages punishment. Second, the punishment paradigm that permeates education distorts teachers' knowledge of several important terms associated with managing students' behaviors. Third, although contrary to the beliefs of many educators and Kohn (1993), positive reinforcement is a universal principle that occurs naturally in every classroom. Therefore, educators should plan its occurrence to increase appropriate behaviors rather than running the risk of it haphazardly promoting inappropriate behaviors.

Techniques based on positive reinforcement have been, and continue to be, ignored and misunderstood.

The information presented in this article is intended for both special and general education teachers at the elementary and secondary levels. Elementary teachers may appear to have an advantage in using techniques based on positive reinforcement because they often interact with the same set of 25 to 30 students for most of the school day. Conversely, secondary teachers may see as many as 180 to 200 students across six to seven periods a day. This actuality may add greater difficulties and complexities. However, the difficulties and complexities are no greater than those currently encountered by those teachers who have found the use of punishment ineffective for managing challenging behaviors of students. In addition, the three propositions described in this article lead to specific implications for practice that educators, parents, researchers, and the general public can use to plan for the occurrence of appropriate behavior rather than reacting to the occurrence of problem behavior.

WHY POSITIVE REINFORCEMENT IS IGNORED AND MISUNDERSTOOD

Techniques based on positive reinforcement have been, and continue to be, ignored and misunderstood. Disavowing the effectiveness of positive reinforcement is a common, albeit fallacious, way to avoid critically analyzing its applications and contributions to education. Explanations for this misunderstanding may be grounded in a basic cultural ethos: The perception of living in a society in which individuals are free to do as they wish—as long as they do so in a socially appropriate manner—without coercion. In this context, coercion is simply the absence of external pressure—being internally motivated to behave well. This societal value contributes to the widespread acceptance of a punishment mentality that ignores data indicating the effectiveness of techniques based on positive reinforcement.

FREEDOM VERSUS COERCION

Techniques based on positive reinforcement are often perceived to threaten individuals' freedom as autonomous human beings. Ironically, punishment, which is the opposite of positive reinforcement, appears much more acceptable because of the perception that it does not threaten individuals' autonomy-people believe they are free to choose to behave in responsible ways to avoid punishment (Maag, 1996). The definitions of both terms are deceptively simple. Positive reinforcement increases the probability that the behavior it follows recurs. Punishment decreases the probability that the behavior it follows recurs in the future. The deceptive nature of these terms is described shortly. The salient point here is that positive reinforcement has been erroneously viewed as being externally applied, thereby intimating those individuals have behaved in certain ways not because they were

internally motivated but because they were being coerced (Maag, 1999). Skinner (1971) placed punishment and motivation in the following perspective:

The trouble is that when we punish a person for behaving badly, we leave it up to him to discover how to behave well, and he can then get credit for behaving well At issue is an attribute of autonomous man. Men are to behave well only because they are good. (p. 62)

As well as being perceived as less coercive than positive reinforcement, punishment is also viewed as a highly effective way for society to control its members. This view was expressed several centuries ago by Machiavelli (1903, 1935) when he discussed the attributes of controlling men: "it is much safer to be feared than loved . . . for they are entirely yours; they offer you their blood, their goods, their life, and their children" (p. 90). Skinner further noted:

If we no longer resort to torture in what we call the civilized world, we nevertheless still make extensive use of punitive techniques in both domestic and foreign relations. And apparently for good reasons. Nature if not God has created man in such a way that he can be controlled punitively. People quickly become skillful punishers (if not, thereby, skillful controllers), whereas alternative positive measures are not easily learned. The need for punishment seems to have the support of history, and alternative practices threaten the cherished valued of freedom and dignity. (p. 75)

This well-ingrained historical and cultural ethos has resulted in a kind of paradigm paralysis—"a condition of terminal certainty"—that prevents people from understanding techniques based on positive reinforcement and acknowledging their effectiveness. The paralysis has completely fortified the punishment mentality that permeates education and much of society.

THE PUNISHMENT PARADIGM

A punishment paradigm has evolved, and been advocated for, since biblical times and is reflected in the proverb "spare the rod and spoil the child." Besides having history on its side, a punishment mentality has been perpetuated for the simple reason that punishing students has traditionally been highly reinforcing to teachers.

Punishment often can produce a rapid—although often temporary—suppression in most students' inappropriate behaviors (Maag, 1999). Furthermore, because punishment techniques may be quickly and easily administered, teachers have found them quite desirable to suppress a variety of classroom disruptions. For example, a teacher may find a student's "obnoxious" behaviors to be aversive. Being sent out of the classroom to sit in the hall or principal's office may be punishing if the student finds exclusion from others aversive. Consequently, the teacher has been reinforced for sending the student out of the room because that act terminated the unpleasantness of the student's behavior. Technically, the teacher has been negatively reinforced. This principle is in effect when any behavior (e.g., sending a student out of the room) results in the removal of an aversion (e.g., a student's obnoxious behavior). Consequently, the behavior that terminated an aversion is more likely to be performed in the future (Axelrod & Hall, 1999). In the case of punishment, a vicious cycle is perpetuated: Teachers are negatively reinforced for punishing students which, in turn, increases the use of punishment, which then reinforces teachers for using it.

The property of punishment that teachers find reinforcing (e.g., sending a student out of the room) leads to a related, and undesirable. phenomenon called the "negative reinforcement trap." Patterson (1975) coined this term to explain coercive relationships that sometime evolve between parents and children, although its emergence can also be observed between teachers and students. In the previous example, a student was removed from the classroom for engaging in behaviors the teacher found obnoxious. If the student lacked the necessary skills for performing the stipulated assignment or found it boring, then being removed from the classroom negatively reinforced the student's performance of obnoxious behaviors because these behaviors terminated the perceived unpleasantness of the assignment. Consequently, teachers and students have often been caught in a trap in which both individuals were negatively rein-

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forced for engaging in counterproductive behaviors.

There is another very powerful reason why punishment continues to be used-it works for about 95% of students attending public schools (Maag, 1999). Despite the fact that students' behaviors have recently become increasingly violent and challenging for teachers to manage (e.g., General Accounting Office, 1997), most students attending public schools nevertheless behave fairly well. Consequently, mild forms of punishments, such as the use of verbal reprimands, fines, or occasional removals from the classroom, typically control most students' behaviors. However, these types of consequences are ineffective for about 5% of students who display the most challenging behaviors (i.e., those that do not respond to traditional forms of punishment).

The paradigm paralysis mentality proceeds in the following manner: Because mild forms of punishment work for most students, then the solution for teachers with the 5% of students with the most challenging behaviors is to simply punish them severely and more often. This reaction, although easily foreseen, results in the application of linear interventions (Watzlawick, Weakland, & Fisch, 1974). For example, if a student stays after school for misbehaving, the problem is presumed to have been addressed by the consequence. But what if the student misbehaves again? The linear solution would be to keep the student after school for 2 days, then 3, and so forth. This type of solution is simply "more of the same" and seldom works. In fact, if punishment were effective, it would be used less rather than more frequently, a point that is elucidated upon shortly.

IGNORING DATA

Researchers have typically relied on empirical data to convince people of the effectiveness of a particular technique, model, or approach. If this tactic worked, applications of positive reinforcement would have already enjoyed much more widespread acceptance and implementation because the successful clinical, educational, and real-life applications are truly remarkable. The effectiveness of this body of research has been well documented in various journals and books

over the past 20 years (Martin & Pear, 1996). Unfortunately, empirical data has little effect because people often only see that for which they are looking. For example, Kuhn (1970) found that scientists had considerable difficulty perceiving data that did not match the expectations created by their paradigms. In some cases, they simply ignored unexpected data. Other times, they distorted the data until they fit their paradigm rather than acknowledging them as an exception to the rules. In extreme cases, Kuhn discovered that scientists were physiologically incapable of perceiving unexpected data—for all intents and purposes the data were invisible.

Kuhn (1970) studied scientists in disciplines such as biology, chemistry, and physics. However, this phenomenon can also be observed in other fields. Two examples from the special education literature come immediately to mind: modality-based instruction and facilitated communication (Bilken, 1992; Dunn, 1990). In both instances, proponents have had a vested interest in perpetuating their use and have tenaciously clung to the belief that they are effective even though well-accepted empirical methods of inquiry have proven otherwise (e.g., Green, 1994; Kavale & Forness, 1987). Another telling example can be found in the following quote by Gresham and MacMillan (1998) in their review of the study published by Lovaas (1987) concerning the efficacy of his Early Intervention Project (EIP) for children with autism: "The EIP authors seem unwilling to admit any methodological flaws in the sampling, design, and analysis of the data" (p. 5).

The solution to this problem may not be to keep trying to inculcate teachers with data supporting the effectiveness of positive reinforcement. At worst, teachers will reject it even more because techniques based on positive reinforcement do not match their paradigms. At best, they will simply say that its effectiveness cannot be disproved. Sagan (1996) clearly explained this propensity by using the analogy of someone purporting to have a dragon in his garage: It is difficult to disprove this assumption if the dragon is invisible, floats in the air, breathes heatless fire, and is incorporeal. Therefore it cannot be seen, spreading flour on the floor cannot capture its footprints, an infrared

sensor cannot monitor the fire, and paint will not stick to its skin. The misleading, yet plausible, conclusion is that the dragon "exists" because its existence cannot be disproved. Instead, the solution is to describe positive reinforcement in a way that is congruent with teachers' existing notions about behavior management and present techniques as easy to apply. Specific recommendations for doing so are described in the last section of this article.

PUNISHMENT PARADIGM: Distorting reality to per-Petuate misunderstanding

Neale and Liebert (1973) ended their textbook on research methods by saying how faith is readily confused with evidence, evidence is freely misunderstood, and misunderstanding is easily perpetuated. Their cogent observations apply to any discipline. In the field of education, perhaps in no area as much as behavior management has it been evident that teachers have lacked a solid working knowledge. The paradigm of punishment tends to distort reality and perpetuates misunderstanding of four common and important terms associated with students' behavior: discipline, punishment, reinforcement, and rewards (Maag, 1997).

POSITIVE REINFORCEMENT AND DISCIPLINE

Positive reinforcement is often misunderstood because it is rarely associated with discipline. Instead, many teachers and parents wrongly assume the terms "discipline" and "punishment" are synonymous. For example, a quick glance at the disciplinary practices appearing in the policies and procedures handbook of any public school in this country would reveal an exclusive focus on punishment: in-school and out-ofschool suspension, expulsion, fines, detention, restitution, and even corporal punishment in some states. Yet according to the American Heritage Dictionary, discipline refers to "training that is expected to produce a specific character or pattern of behavior, especially training that produces moral or mental improvement." A key word in this definition is improvement that means "to increase, develop, or enhance." Con-

versely, punishment, by definition, does one thing—decreases behavior. Simply because a student's inappropriate behavior may be suppressed with punishment does not guarantee that the student knows what appropriate behavior should be performed in its place. Rutherford and Neel (1978) stated that in many cases, the use of punishment leaves the development of desirable behaviors to chance. There is a perverse irony when adults evoke punishment with the phrase "I'm going to teach you a lesson." Teaching involves giving children skills and knowledge, not suppressing or eliminating behavior. The point of this discussion is to help teachers refocus on a goal of education: to help students acquire knowledge and skills.

POSITIVE REINFORCEMENT AND PUNISHMENT: FUNCTION OVER FORM

In order to understand discipline better, it is helpful to examine the concepts of positive reinforcement and punishment more thoroughly. Positive reinforcement and punishment were defined previously. The key consideration in the definitions is that positive reinforcement and punishment are not things but rather effects. The effects are to either increase or decrease a behavior. Therefore, the statement made by some teachers, "I've tried positive reinforcement, and it doesn't work," is oxymoronic because, by definition, if a consequence did not function to increase behavior then it was not a reinforcer. Nevertheless, many teachers continue to believe that positive reinforcement and punishment are

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things that are either received or removed. The following examples may help clarify the distinction between things and effects.

A student is yelling and running around a classroom excessively. As a consequence, the teacher spends a few minutes talking "therapeutically" with the student, conveying warmth and

caring, empathic understanding, and unconditional positive self-regard for the precipitating circumstances in the student's life. As a result of this communication, the student stops yelling and running. By definition, the teacher's attention was a punisher because it had the effect of decreasing the untoward behaviors. The opposite effect can also occur. For example, as a consequence for a child placing his hand too close to a hot burner, a parent may say a stern "No" and slap the back of the child's hand. This action may create pain and even temporary reddening of the skin. Yet, if the child repeatedly places his hand by the burner for several ensuing days, then the slap was not punishment but rather positive reinforcement because the behavior increased. Adults sometimes look upon these children, who seem to continue behaving poorly even after presumably receiving "punishment,"

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as disordered or even masochistic. What adults often fail to understand is that the attention a child receives from the parent may be more reinforcing than the pain the slap inflicted is punishing.

The two previous examples were meant to illustrate that their effects on behavior define punishment and positive reinforcement functionally. Alberto and Troutman (1995) pointed out how this definition is often misunderstood because of the colloquial way in which punishment is viewed as unpleasant things done to people who behave poorly. In the last example, the faulty, yet common, assumption was that punishment was the "thing" administered—the physical slap-not its effect. Ironically, if punishment were effective, it would be used less rather then more frequently with a particular student because the desired effect would be to reduce the inappropriate behavior. However, students who repeatedly receive verbal reprimands, are sent out of the classroom, or receive suspensions are not being punished: They are instead being positively reinforced. The adage "negative attention is better than no attention" certainly applies here. Teachers expect students to behave well, and consequently ignore them when they do so, but usually give them negative attention when they behave poorly (Maag, 1996). Adult attention, even if it is negative, is a powerful reinforcer—especially for students with the most challenging behaviors who typically receive very little positive attention.

Many researchers also experience difficulty understanding the functional definition of positive reinforcement and punishment. Unfortunately, because researchers are often viewed as "experts," their misunderstanding perpetuates the myth to teachers that positive reinforcement does not work. For example, Biederman, Davey, Ryder, and Franchi (1994) conducted a study on the effects of interactive modeling versus passive observation. They reported that verbal reinforcement detracted from the performance of children with developmental delays during the interactive modeling condition. They further speculated that the reinforcement—rewarding comments such as "good job"-may have confused the children and distracted them from performing the desired behavior. In his response to their assertions, Ward (1995) correctly pointed out how reinforcement cannot be said to have occurred unless the behavior it followed increased. Therefore, simply because "verbal praise" sounds like a reinforcer in an everyday sense does not automatically mean it functions as a reinforcer.

The distinction between form and function is similarly not well understood when applied to the use of punishment. Here is a telling example encountered by the author. A teacher was disturbed that a student frequently did not bring his reading book to class. As a result, the student was required to write 100 times, "I will remember my book." Most teachers would probably view this consequence as a kind of punishment. Yet what behavior is the teacher trying to decrease—remembering the book? This unfortunate case illustrates how punishment is often misunderstood and can be misapplied with counterproductive results. Not coincidentally, the student in this example was embarrassed

about his learning disability in reading. Therefore, "forgetting" to bring the book to class served the function for him to avoid what he considered to be more aversive—being embarrassed in front of his peers when asked to read—than having to repeatedly write sentences.

THE CONTRADICTION OF REINFORCEMENT AND REWARDS

The functional definition of positive reinforcement frequently does not help some teachers get past the stereotypical notion that it is a manipulative tool created to coerce students into behaving appropriately. Consequently, reinforcement continues to be viewed by some educators as tantamount to bribery, undermines students' abilities to become self-directed, and quells internal motivation (Kohn, 1993). The problem with this assertion is that many teachers incorrectly equate the terms reward and reinforcement. Unlike reinforcement, a reward is, in fact, a thing given to acknowledge an accomplishment. Other words for reward are "merit" or "prize." A reward may or may not function as a reinforcer. For example, an athlete may begin training to compete in the discus throw several vears before the summer Olympics begin. During this time, his discus-throwing behavior would occur at a high rate as part of his training regime. Consequently, he wins the gold medal-certainly the ultimate reward-and decides to retire from competition. The subsequent frequency of discus-throwing behavior certainly would decrease over the level displayed prior to competing in the Olympics. Therefore, the "reward" (i.e., gold medal) functioned as punishment because its effect was to decrease future discus-throwing behavior. On the other hand, if the athlete places a disappointing 10th and subsequently spends more time practicing throwing the discus to compete more effectively in the next Olympiad, then his poor showing functioned as reinforcement because it had the effect of increasing later discus-throwing behavior.

The point of the examples of the student running and yelling in the classroom, the child who places his hand by the hot burner, and the Olympic athlete the teachers find very difficult to comprehend because they challenge popular views of reinforcement and punishment. Many teachers are puzzled as to how talking nicely to a student, for example, could be punishment because punishment certainly must be something unpleasant. However, once teachers understand that reinforcement and punishment are effects rather than things, their ability to managing students' challenging behaviors will increase dramatically. But first, it is important to address the issue of external reinforcement stifling motivation.

There is an irony in the belief that Kohn (1993) and many teachers hold that providing external reinforcement will stifle children's internal motivation: These individuals often have few qualms that administering external punishment will cause the same problem. In other words, why would externally applying reinforcement but not punishment stifle internal motivation? The answer has nothing to do with motivation, but rather that misapplications and misunderstandings are perpetuated by a cultural ethos condoning punishment and eschewing reinforcement.

THE NATURALLY OCCURRING PHENOMENA OF POSITIVE REINFORCEMENT AND PUNISHMENT

Some teachers have said, "I don't believe in using reinforcement." This statement is as logically absurd as saying, "I don't believe in gravity." Just because someone may not like something does not consequently abolish its existence. Reinforcement and punishment are naturally occurring phenomena—all behaviors are followed by certain consequences. If a behavior increased, then the consequence functioned as a reinforcer; if a behavior decreased, then the consequence functioned as a punisher. Social reciprocity provides an example of reinforcement naturally occurring. Social reciprocity is a term used to describe mutually reinforcing interactive exchanges between individuals (Strain, Odom, & McConnell, 1984). Social interaction can be conceptualized, analogously, as a tennis match: One player hits the ball (initiates a conversation) to another player who, in turn hits the ball back (responds). However, if one player does not hit

the ball back (fails to respond), then the volley (interaction) ends. In other words, if a person asks someone a question and that person responds positively, then question asking has been reinforced and the interaction will continue. On the other hand, if a person asks someone a question and that person either walks away or responds negatively, then question asking has been punished and the interaction will terminate.

THE PROPRIETY OF REINFORCEMENT

With great effort, opponents of reinforcement can sometimes be convinced that it is a naturally occurring phenomenon; nevertheless, they continue to argue with its propriety. Their specific objection is usually to its planned use to elicit certain behaviors in others. This position on reinforcement is as ridiculous as arguing whether gravity is good or bad-both are naturally occurring phenomena. Furthermore, this position takes teachers' foci away from the meaningful task of analyzing interaction patterns and reinforcement contingencies that exist in classrooms in order to restructure them to increase desirable student behaviors. To ignore this ecologically important aspect of behavior management is to allow reinforcement to occur randomly and run the risk of it increasing students' inappropriate behaviors. Nevertheless, many teachers continue to believe that techniques based on positive reinforcement have been tried and have failed. This belief is not only a self-contradiction but also fallacious. Techniques based on positive reinforcement have rarely represented a dominant approach to managing students' behavior (Maag, 1999).

Perhaps part of the problem educators have in understanding and correctly using techniques based on positive reinforcement is the perception that they either require too much effort or do not work well enough. This perception makes it easy for people to fall into dichotomous thinking—techniques based on positive reinforcement either work perfectly or they do not work at all. This irrational belief may prompt some teachers to abandon empirically-tested techniques and be easily bamboozled by the latest educational fads such as neuro-repatterning, facilitated communication, megavitamin therapy, electroencephalogram

(EEG) biofeedback, and optometric vision training, to name only a few, and none of which enjoy much, if any, empirical support (Kauffman, 1997; Mercer, 1997).

GOOD IS NOT GOOD ENOUGH

It is easy to find abundant examples of children who display inappropriate behavior. Some children display problem behavior to such a serious and chronic degree that their independence in society is limited. If, as indicated throughout the empirical literature, behavioral procedures are effective, why have students' behaviors become increasingly challenging in recent years? Granted, part of the problem may have resulted from an ever-changing society in which children are increasingly impacted by sex and violence on television, free access to the Internet, and less supervision from parents who are working long hours to make ends meet. There are also a host of factors-homelessness, sexual and physical abuse, divorce, and substance abuse-that place children at risk for displaying a wide range of challenging behaviors. Nevertheless, youngsters spend more time in school than in most structured environments outside the home and have their most consistent and extensive contact with teachers who can scrutinize their behaviors on an ongoing basis. The structure of the classroom provides the opportunity for teachers to apply a variety of techniques based on positive reinforcement that have empirical support regardless of student characteristics or home situations (Wielkiewicz, 1995).

In spite of their empirical support, techniques based on positive reinforcement are seldom used correctly. Part of the problem may be that when techniques based on positive reinforcement are used, they are often implemented haphazardly and inappropriately. Many teachers still believe that techniques based on positive reinforcement consist of nothing more than providing students with M&M candies or stickers when they are "being good" (Maag, 1999). Behavior management is much more—analyzing behavior, deciding what to change, collecting information on the behaviors of concern, using schedules of reinforcement, and monitoring progress-not to mention the plethora of techniques based on positive reinforcement that run

the gamut from those that are teacher-directed to those that are student-directed.

Managing students' challenging behaviors effectively is a "good news-bad news" story. The good news is that the technology has long existed to develop, implement, and monitor effective behavioral interventions for managing students' challenging behaviors. The bad news is that this process takes considerable time and effort. One of the major impediments in having educators put forth the effort to develop and implement techniques based on positive reinforcement is that many do not believe it is their job to manage students' behavior.

THE WAY THINGS ARE AND COULD BE

There is a prevailing view that teachers' primary responsibility is to teach students academic behaviors and to control (i.e., bring into alignment) their socially inappropriate behaviors. Some teachers, and even entire schools, have developed elaborate management plans to control students' challenging behaviors. This "control mentality" is pervasive throughout education and places teachers in a reactive, instead of proactive, position when managing students' challenging behaviors. Managing students' challenging behaviors effectively will continue to be a frustrating endeavor until teachers view misbehavior as an opportunity for increasing positive social interaction rather than being something to be punished (Maag & Webber, 1995). For example, most teachers would readily agree that when students make mistakes in division, the goal is not to "punish" or decrease division behavior. Rather, procedures are implemented to provide students with the correct strategy and practice to increase their competence in division. The same logic should apply to students' challenging behaviors.

Unfortunately, many teachers inaccurately believe the correction of challenging behaviors is tantamount to effective instruction. Although managing challenging behaviors may be a precursor to instruction, they are not synonymous. Correction occurs after an incident and, consequently, is reactive. However, academic instruction is a planned event and, therefore, is proactive. Neel (1988) provided the following example using reading:

In a reading lesson, who schedules the time of instruction, selects the material, makes the presentation, looks for responses, and then provides correction? The teacher does. When a behavior problem occurs, who schedules it, provides the materials, evaluates the response, and decides if the incident need go on? The student does. Who, then, is doing the learning? (p. 26)

Neel contended that managing students' challenging behaviors is difficult because teachers place themselves in the role of student, a role that they are not used to and often find uncomfortable. As long as the management of students' challenging behaviors focuses solely on correction techniques, teachers will continue to experience failure and frustration. Teachers should spend as much time developing positive, proactive behavior management plans as they spend developing instructional lesson plans.

In eschewing this last recommendation, teachers are likely to believe techniques based on positive reinforcement simply do not work well enough, or not at all, when the real problem is that they have not been properly implemented consciously, consistently, or appropriately. For example, the literature is replete with studies documenting very low, and in many instances nonexistent, rates of positive teacher statements directed to students when they perform desirable behavior (see Mastropieri & Scruggs, 1994). Even more disturbing, teachers typically give students attention only when they perform inappropriate behaviors (Maag, 1999). Ironically, teacher praise has been supported as among one of the most empirically sound teacher competencies (Maag & Katsiyannis, 1999). The irony is that because teacher attention is so effective, it nevertheless is being used primarily when students misbehave.

It is equally disappointing that teachers fail to see the powerfully reinforcing value in such natural human behaviors as eye contact, smiles, kind words, physical proximity, and social interaction. All too often teachers justify not using positive reinforcement by stating that they "expect" students to behave well. Ironically, they have no difficulty "reacting" to students when they behave poorly. Furthermore, simply having the expectation that students "should" behave

well, especially those with the most challenging behaviors, is a prescription for failure and frustration. The use of the word "should" is a classic example of teachers engaging in a common type of irrational belief: demandingness (Ellis, 1985). Demandingness is a magical and ineffective attempt to change events to a more desirable outcome without engaging in any behavior other than saying either the word "expect" or "should."

IMPLICATIONS FOR PRACTICE

Effectively changing students' behaviors requires teachers to also change their behaviors, which, in turn, requires that they understand how positive reinforcement is congruent with their values and that the techniques are easy to apply. These goals can be addressed when teachers prioritize their values. Was not helping children acquire knowledge and skills not a main goal for becoming a teacher? If this is a major goal, then teachers will find it easier to place other goals (such as the student completing work independently) to the side, at least during the time content knowledge and skills are being taught. Changing teachers' values is the most difficult aspect because they have become well-ingrained-presenting easy-to-use techniques is simpler. There are a variety of easy-to-implement recommendations for using positive reinforcement. Several of them are presented here.

1. Catch Students Being Good. Catching students being good is one of the easiest and most effective ways for dealing with students with challenging behaviors (Maag, 1999). It is not used more often because many teachers believe students "should" behave well and, consequently, only give them attention for displaying inappropriate behaviors. These students have learned very early in their school career that the only way they get attention from teachers is to misbehave. As a general rule, the second time a teacher gives a student a verbal warning should be a cue for that teacher to catch the student being good. Ironically, and unlike punishment, teachers only have to catch students being good occasionally. Intermittent reinforcement can

- maintain high rates of students' appropriate behaviors (Alberto & Troutman, 1995). On the other hand, punishment is most effective when it is delivered continuously (Schmidt, 1982). Therefore, what takes less time and effort: observing a student occasionally to positively reinforce him or observing the student continuously to punish him?
- 2. Think Small. There is an interesting reaction some teachers have to students with challenging behaviors: They expect students with challenging behaviors to behave better than students without behavioral challenges (Maag, 2000). For example, some teachers expect students with attention-deficit hyperactivity disorder (ADHD) to sit quietly and pay attention longer than students without this disorder (Reid & Maag, 1998). In other instances, students pose such behavioral challenges that teachers frame the problem as a laundry list of misbehaviors that must be eliminated. The solution is for teachers to set small goals for students and then reinforce successive approximations of behaviors toward that goal. For example, if a student is chronically late to class by 10 min or more he should be reinforced when he makes it through the door in 5 min. Once he begins to make improvements in the desired direction, future behavior changes become much easier.
- 3. Have a Group Management Plan. There are two reasons why it is easier to manage specific students with challenging behaviors when the entire class is well behaved. First, group management plans make use of intermittent reinforcement that maintains high levels of appropriate behavior (Maag, 1999). Second, it is easier to implement a more intensive individual positive reinforcement intervention once a classwide management plan is in place. There are several novel ways to implement a group management plan. It is beyond the scope of this article to describe each in detail. However, Rhode et al. (1995) presented a detailed description of three approaches: 100 square chart, compliance matrix, and mystery motivators. An additional approach is the Good Behavior Game. Three appropriate behaviors are listed on the chalk-

board. Prerecorded random tones are played on a tape recorder during a lesson. When a tone sounds, the teacher places three marbles in a jar if everyone in class is engaging in one of the three appropriate behaviors. The class earns a reinforcer (e.g., movie or popcorn on Friday) if the jar is filled with marbles by the end of the week (Maag, 1999).

- 4. Prevent Behavior Problems. Punishment is less likely to be used when teachers anticipate and prevent behavior problems from occurring. It is easier to prevent behavior problems than to try to reestablish control. The following strategies work to enhance a positive classroom climate for both students with and without challenging behaviors (Rhode et al., 1995). First, teachers should establish classroom rules that specify appropriate behaviors and the positive reinforcement students earn for performing them. Second, teachers should strive to have 70% of their day devoted to students being academically engaged. Third, teachers should not let students with challenging behaviors sit next to each other. Fourth, teachers should spend as much time as possible walking around the classroom to monitor students' behaviors and subtly reinforce them.
- 5. Use Peer Influence Favorably. Peer influence exists in every classroom. Students with challenging behaviors have learned that the easiest way to get peer attention, either positive or negative, is to misbehave. Therefore, teachers should use peer influence in a socially constructive manner. A common mistake some teachers make is to override the influence of peers with punishment. For example, a teacher may punish a student for making animal noises in class. However, the student may be receiving reinforcement from peers in the form of smiles, comments, snickers, or subtle gestures (Rhode et al., 1995). The punishment must be severe to override the reinforcing value of peer attention. The most effective way to use peer influence positively is to implement a group management technique such as one described previously.

The most effective behavior managers are teachers who acknowledge that reinforcement and punishment occur naturally and, consequently, analyze and modify environmental, curricular, and instructional variables to promote appropriate behavior. These teachers work hard to positively reinforce appropriate student behavior and ignore misbehavior when it does not interfere with other students' learning, classroom routines, or is otherwise reinforcing. They also sparingly use reprimands and only in an even-handed, matter-of-fact tone. Students view these teachers as people whose attention is valued, whom they want to be around, whom they enjoy interacting with, rather than as a watchdog to be feared because of the punishment they may dole out.

Perhaps there are not more teachers who engage in these activities because they are not reinforced for doing so. Teachers are paid whether or not students display appropriate behaviors. Their workloads are not based on how effective they manage behavior, or on how much their students learn. More conceivably, teachers who use positive reinforcement techniques effectively may be punished: Administrators may see them as the likely candidates to deal with students with the most challenging behaviors. These teachers, in turn, may receive the preponderance of these students and that represents a daunting task, even for special educators trained in behavior management with small case loads and paraeducator assistance. The unintended result may be to punish good behavior management skills.

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